

SUPPORT FOR THE AMENDMENTS

The amendments to the claims are supported by the specification. Accordingly, no new matter is believed to have been added to the present application by the amendments submitted above.

REMARKS

Claims 31-67 are pending.

Applicants would like to thank Examiner Woodward for the indication that Claim 38 is allowable. Favorable reconsideration of all of the claims is respectfully requested at this time.

The rejections of the Claims 31-37, 44-49, 52 and 62-67 under 35 U.S.C. §102(b)/§103(a) and Claims 39-41, 50, 51, 54 and 55 under 35 U.S.C. §103(a) over Japanese reference 4100994 (JP '994) are respectfully traversed. Applicants submit herewith an English translation of JP '994. This reference fails to describe or suggest claimed polymer dispersion.

The present invention relates to an alkyldiketene-containing aqueous polymer dispersion, obtained by aqueous emulsion polymerization of at least one hydrophobic monoethylenically unsaturated monomer in the presence of at least one alkyldiketene, where the hydrophobic monoethylenically unsaturated monomer and the alkyldiketene have an average particle diameter of 10 to 500 nm. Thus, in the claimed invention, the hydrophobic monoethylenically unsaturated monomer is polymerized in the presence of the alkyldiketene. See Claim 31.

In contrast, JP '994 discloses the reaction of a polyalkylene polyamide, followed by the addition of an alkyldiketene. Afterwards, an emulsion polymerization of unsaturated monomers is carried out in absence of alkyldiketene. The alkyldiketene, treated with the polyalkylene polyamide as discussed above, is added afterwards. See working example 2 at page 2 and 3 of the English translation. Therefore, JP '994 fails to disclose the present invention, because a hydrophobic monoethylenically unsaturated monomer is not polymerized in the presence of an alkyldiketene, as claimed. Moreover, there is no

suggestion in the reference to conduct the polymerization in the claimed manner. In addition, JP '994 fails to disclose or suggest the particle size of the monomer or the alkyl diene.

In view of the foregoing, the claimed polymer is neither anticipated by nor obvious over JP '994. Accordingly, withdrawal of these grounds of rejection is respectfully requested.

The rejection of the claims under 35 U.S.C. §112, first paragraph, is believed to be obviated by the amendments submitted above.

Claim 31 has been amended to specify an average particle diameter of 10 to 500 nm.

Claim 36 has been amended to replace "vinyl ethers of C<sub>12</sub>–C<sub>22</sub>-alkyl acrylates" with --C<sub>12</sub>–C<sub>22</sub>-alkyl acrylates--.

In view of these amendments, withdrawal of this ground of rejection is respectfully requested.

The rejection of the claims under 35 U.S.C. §112, second paragraph, is believed to be obviated by the amendments submitted above in part are, in part, respectfully traversed.

Regarding the recitation of "surface-active agent" in Claims 33 and 46, that term is discussed in the specification at pages 4 and 5 and, moreover, is well-known in the art. One reading the claims in the light of the specification would appreciate the meaning of the term "active agent."

Claims 35 and 47 have been amended to specify an additional nonpolymerizable hydrophobic compound.

Claims 36 and 48 have been amended to correct the issue raised in the Office Action.

Regarding Claims 37 and 49, a binary mixture has two phases and a polynary mixture has more than two phases.

Claims 37 and 39 have been amended to correct the issue raised in the Office Action.

Regarding Claim 37, line 8, Applicants confirm that the recited materials are alternatives, as evidenced by the “and/or” language.

Claim 51 has been amended to depend from Claim 35.

Claim 53 has been amended to specify “a surface active agent.”

Regarding Claims 57-60, Applicants confirm that the depending claim defines and exemplifies the subject matter from which the claim depends.

In view of the foregoing, the claims are definite within the meaning of 35 U.S.C. §112, second paragraph. Withdrawal of this ground of rejection is respectfully requested.

Applicants submit that the present application is in condition for allowance. Early notice to this effect is earnestly solicited.

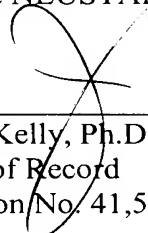
Respectfully submitted,

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